



iPod Nano 4th Generation Logic Board Assembly Replacement

Written By: Walter Galan



INTRODUCTION

Replacing the logic board assembly gives you new flash memory as well as a new battery.

TOOLS:

- [iFixit Opening Tools](#) (1)
 - [Phillips #00 Screwdriver](#) (1)
 - [Spudger](#) (1)
 - [Tweezers](#) (1)
-

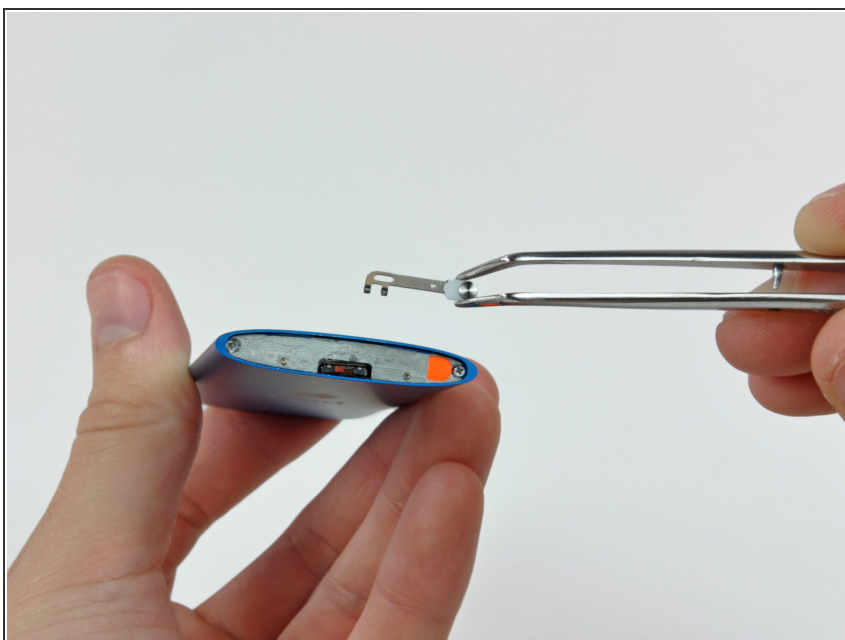
Step 1 — Glass Panel



- Insert the edge of an iPod opening tool into the gap between the outer case and the top bezel.
- Pry the top bezel off the adhesive securing it to the display retainer.

 At this point the hold switch slider is free and may fall. Be careful not to lose it.

Step 2



- Remove the hold switch slider from the top of the Nano.

Step 3



- Remove the two angled Phillips screws from the two corners of the display retainer.
- ⚠ These screw heads are extremely small and easily stripped.

Step 4



- Insert an iPod opening tool between the outer case and the display retainer.
- Use the tool to slide the display assembly out of the case slightly.
- ⚠ Do not rotate the display retainer about the top edge of the display, as it is attached to a thin steel bracket that is easily broken.
- ⚠ Do not forcefully remove the display retainer, as the hold switch cable is liable to snap.

Step 5



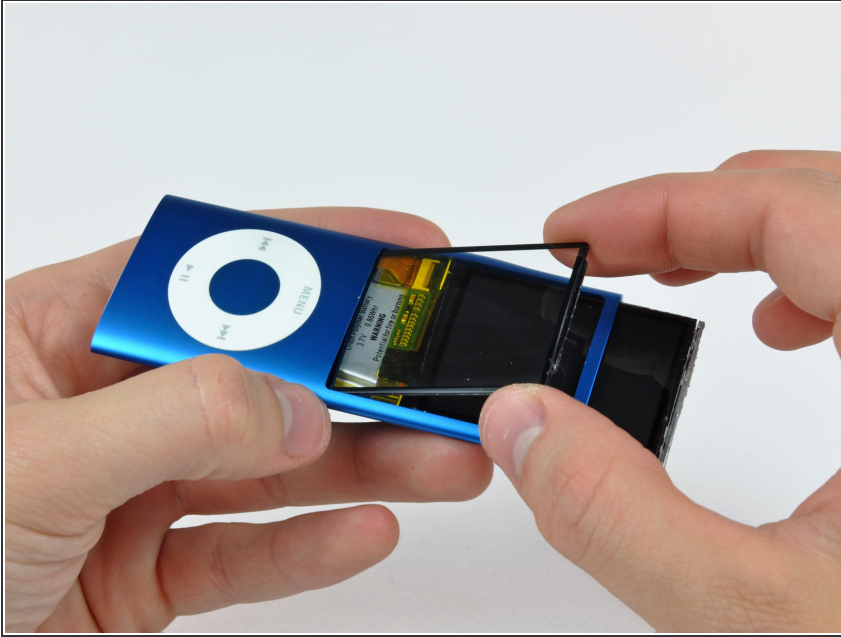
- Slide the display out of the Nano. It will move about .5" until the display data cable limits its travel.
- ⚠ Do not put unnecessary tension on the very thin display data cable.

Step 6



- With the display pulled out of the case as much as possible, gently press on the lower edge of the glass panel until it pops in slightly (~1 mm).
- Use your thumbs on the lower edge of the glass panel to slide the glass down and into the case until the top edge pops up out of the case.

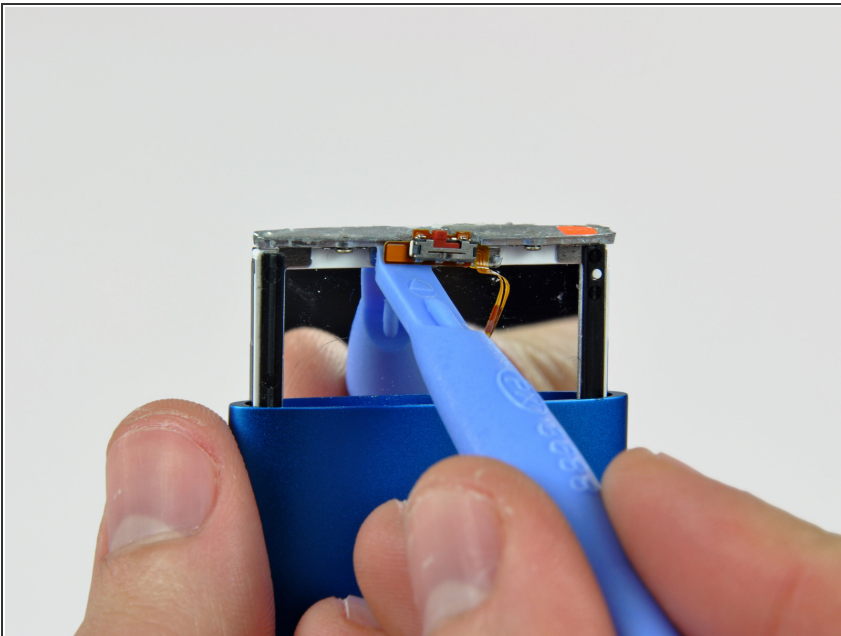
Step 7



- Lift the glass panel out of the Nano.

✦ Before reinstalling the glass panel, be sure to clean the face of the display and the inside of the panel as any dust or fingerprints will be annoyingly visible when the Nano is turned on.

Step 8 — Display



- Use the edge of an iPod opening tool to separate the hold switch from the adhesive securing it to the top edge of the display.

⚠ The hold switch ribbon cable is extremely fragile and easily broken. Work gently.

Step 9



- Peel back the Kapton tape covering the display data cable socket.

Step 10



- While holding the light colored socket down with one finger, use the tip of a spudger to flip the ZIF cable lock up toward the bottom of the Nano.

Step 11



- Use an iPod opening tool to peel the display data cable off the thin metal plate attached to the display.

⚠ Be careful not to rip the display data cable.

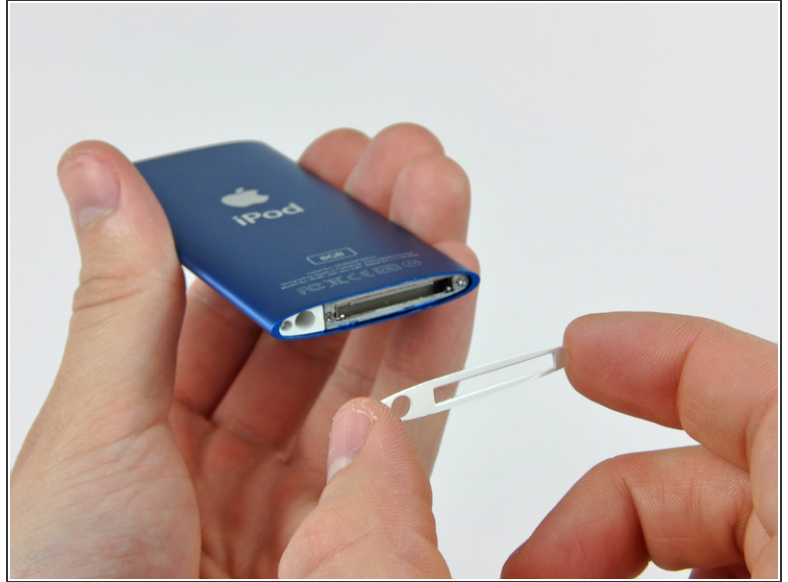
Step 12



- Pull the display out of the Nano, minding the hold switch cable that may get caught.

⚠ As you pull the display out of the case, **be careful not to break the hold switch cable.**

Step 13 — Logic Board Assembly



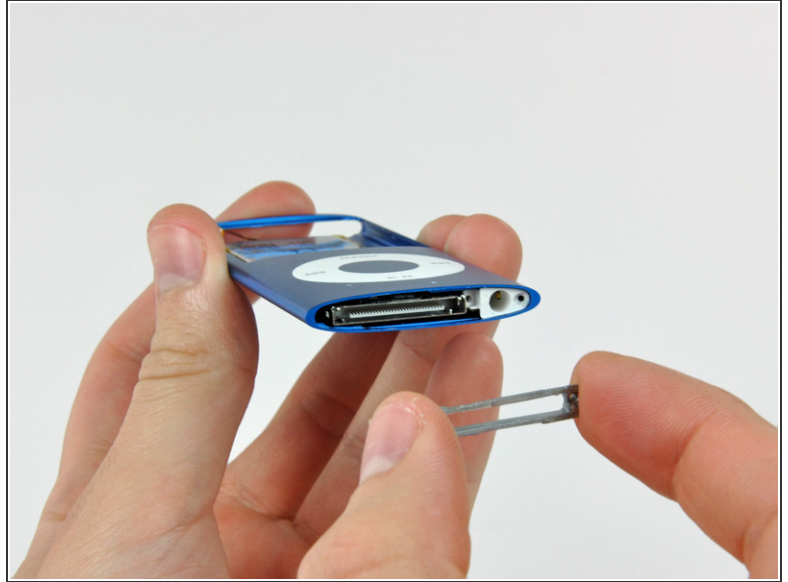
- Insert an iPod opening tool between the bottom bezel and the dock connector.
- Separate the bottom bezel from the adhesive securing it to the Nano and set it aside.

Step 14




- Remove the three Phillips screws along the bottom of the Nano.
- ⚠ These screw heads are extremely small and easily stripped.
- ⓘ The slightly longer of the three screws belongs in the middle.

Step 15




- Use an iPod opening tool to pry the aluminum dock bezel out of the Nano.

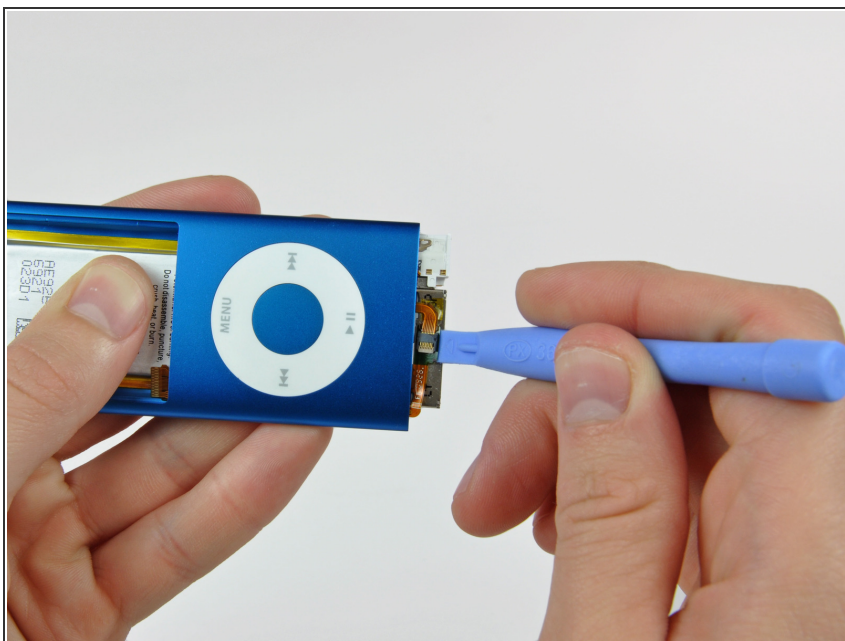
 The dock bezel is very thin cast aluminum. To avoid breaking it, do not excessively flex it during removal.

Step 16



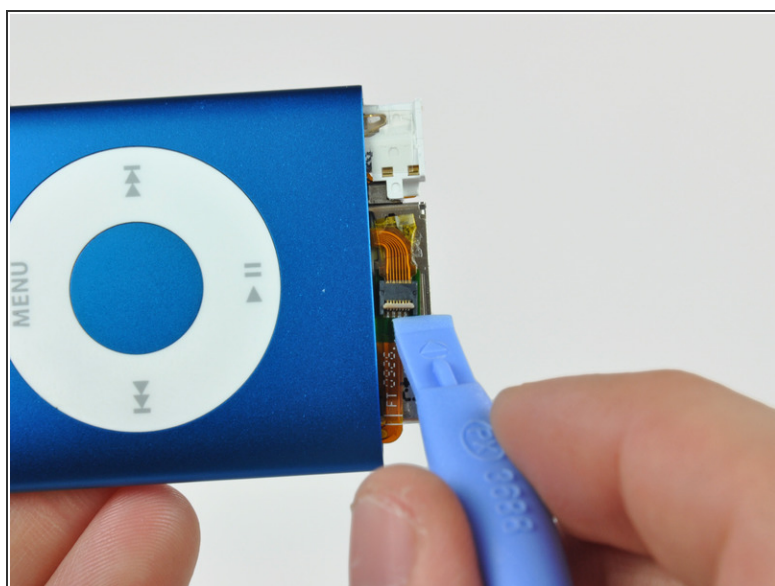
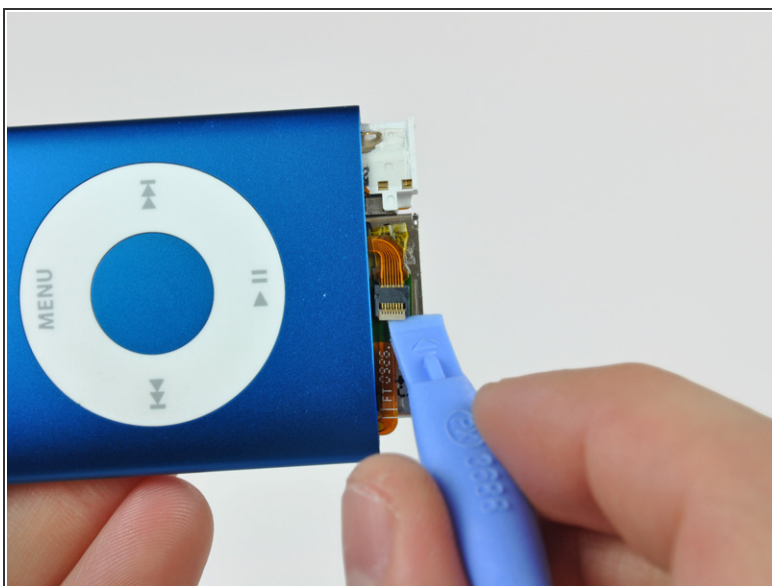
- Use the flat end of a spudger to separate the battery from the adhesive securing it to the outer case.
-  The lithium polymer battery used in the Nano is very flexible. Try not to deform it excessively while separating it from the outer case.
- Use the flat end of a spudger to push the logic board assembly and battery slightly out of the bottom of the Nano. Stop once it pops out a little bit.

Step 17



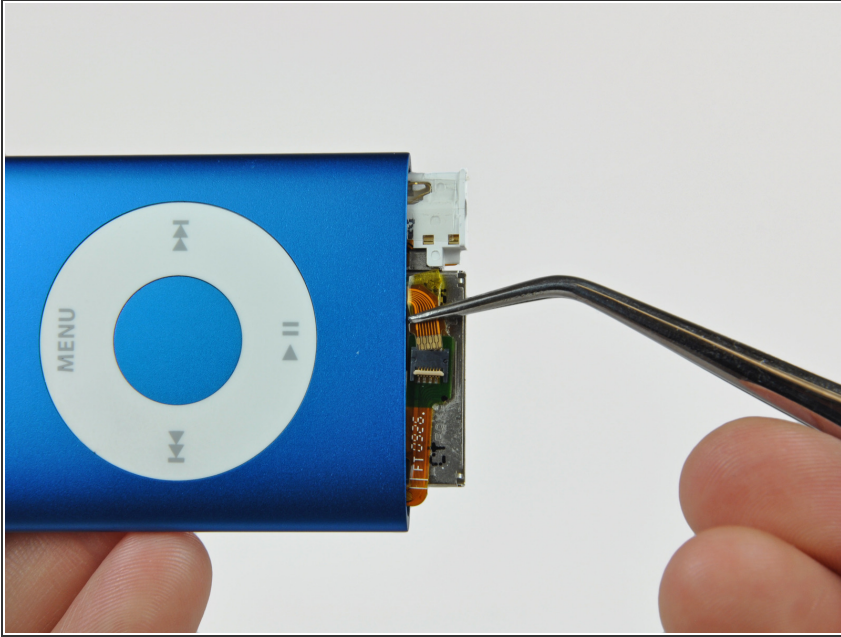
- Use the edge of an iPod opening tool to peel the click wheel ribbon cable and its ZIF socket off the dock connector.

Step 18



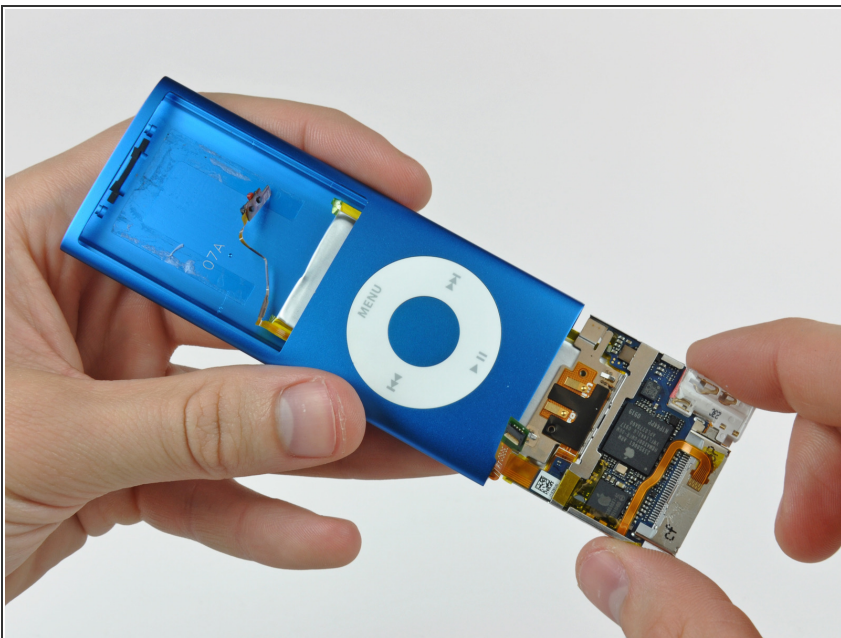
- Use the edge of an iPod opening tool to flip the ZIF cable lock up toward the headphone jack.

Step 19



- Use a pair of tweezers to slide the click wheel ribbon cable out of its socket.
- ⚠ Before proceeding, be sure that **both** the **click wheel ribbon cable socket** *and* **its cable** are freed from the adhesive securing them to the dock connector and logic board.
- Peel back the cable on both ends!

Step 20



- Pull the logic board assembly out of the outer case, minding the hold switch and click wheel cables that may get caught.
- ⓘ When reassembling, ensure the click wheel cable is toward the front of the Nano and not in the grooves on the side. If it is in the groove you will probably cut it while sliding the logic board into place.

To reassemble your device, follow these instructions in reverse order.